

Kelheim develops new VSF that reflects infrared radiation



Germany based - Kelheim Fibres, a manufacturer of viscose speciality fibres (VSF), has developed a new viscose fibre that reflects infrared radiation.

“The human body - like any other matter with comparable temperature - releases a large part of its energy via thermal radiation and this radiation is mainly composed of infrared light,” Kelheim says.

The fibre producer adds, “It leads to a loss of energy and therefore to a cooling of the human body.”

The newly developed viscose fibre with incorporated IR-reflecting particles can significantly reduce this process.

The thermal radiation emanating from a body is reflected by the particles incorporated in the viscose fibre and sent back to the body, so reducing the cooling of the person.

“In addition to this thermal retention function, the wearer of such a textile also benefits from the typical properties of a viscose fibre such as wearer comfort, softness and skin friendliness,” Kelheim reveals.

It adds, “This is achieved by the intrinsic quality of the treatment: in contrast to a subsequent finish with additives based on titanium oxide, the mineral IR-reflecting particles are incorporated into the fibre’s core, preserving the typical fibre properties permanently.”

First test results of the new fibres that have already been successfully manufactured on a pilot scale, show significant temperature effects in comparison to a standard viscose fibre.

Used in functional underwear, the thermal effect can increase the well-being of the wearer even at low temperatures. In functional sportswear, the new fibre can lead to improved performance and a faster regeneration of the athlete, thanks to improved blood circulation.

As a next step, Kelheim Fibres is planning physical and physiological textile tests on the fibre. (AR)

Provided by fibre2fashion

No. 173 November 2014